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Implementation of locking schemes in extended dependency graphs

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Abstract

Concurrency control in deductive databases is an important issue which deserves much attention. In this paper we examine implementation of locking schemes. We adopt a model based on dependency graphs extended with compatibility trees, and describe features related to implementation of locking schemes in this model. Algorithms for read and write locking schemes are provided, and are illustrated by several examples. Although these algorithms are simple, they exemplify what are the unique problems of concurrency control that may be encountered in deductive databases, and how to deal with these problems.

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